

# **SD-D05 User Manual**

**Rev.: 1.0**



# SD-D05

## HIGHLIGHTS

- LED Status Indicators for Operation Status
- Integrated Accelerometer
- Temperature and Humidity Sensor
- Barometric Pressure Sensor (Option)
- Tamper Sensor, Record the Disassembly Time of the Housing
- BLE 5.2 Support, Low Power Consumption
- Large Non-rechargeable Battery
- Configurable Parameters for BLE Operation, LED Functionality and Periodic Reports
- Easy Installation

## SPECIFICATIONS

### SKUs for Features

- SD-D05

### SENSORS

- Accelerometer: 3-axis
- Temperature and Humidity Sensor
- Tamper Sensor
- Barometric Pressure Sensor (Option)

### BATTERY INFORMATION

- Type: Non-Rechargeable battery
- Capacity: 1000mAh @ 3.0V
- Battery Life: TBD

### BLUETOOTH

- BLE 5.2 Low Power Consumption

### PHYSICAL

- Dimensions: 70.94 x 49.9 x 20mm
- Weight: TBD

### ENVIRONMENTAL

- IP67 Rating
- Operation Temperature: -20°C to +60°C
- Storage Temperature: -40°C to +85°C

### APPROVALS

- FCC
- IC
- CE

### INTERFACE IOs

- Rear button (Power on)

## 1. Power up SD-D05

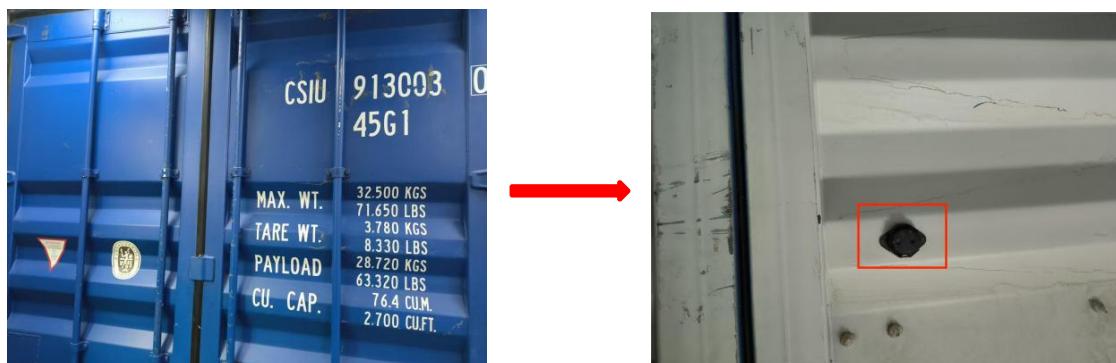
1.1 press the Power button and hold for 5s to power on, the LED light will be on for 5 minutes.



## 2. Install SD-D05 into the container

2.1 Turn on SD-D05 and install it into the container.

2.2 The Bluetooth of SD-D05 will send a broadcast to the outside.



## 3. Install the tracker AN95

The AN95 is powered by batteries and does not have an external power source.

3.1 Turn on AN95 and place it within 10 meters of SD-D05.

3.2 The Bluetooth of AN95 will automatically connect after searching for SD-D05, and get all historic data from SD05 then to report the event to server.

Raw data:		
0x11073C9EDEEC746F2FB53A4276AA0100D DFB0AFF00670000000000000000FFF59000 A0110010104C934000000000060953442D30 35		
Details:		
LEN.	TYPE	VALUE
17	0x07	0x3C9EDEEC746F2FB53A4276AA0100 DDFB
10	0xFF	0x00670000000000000000
15	0xFF	0x59000A0110010104C93400000000
6	0x09	0x53442D3035

Note: How to operate remotely and check reports on AGS, the please refer to the file **Basic Operations on the AGS Server**.

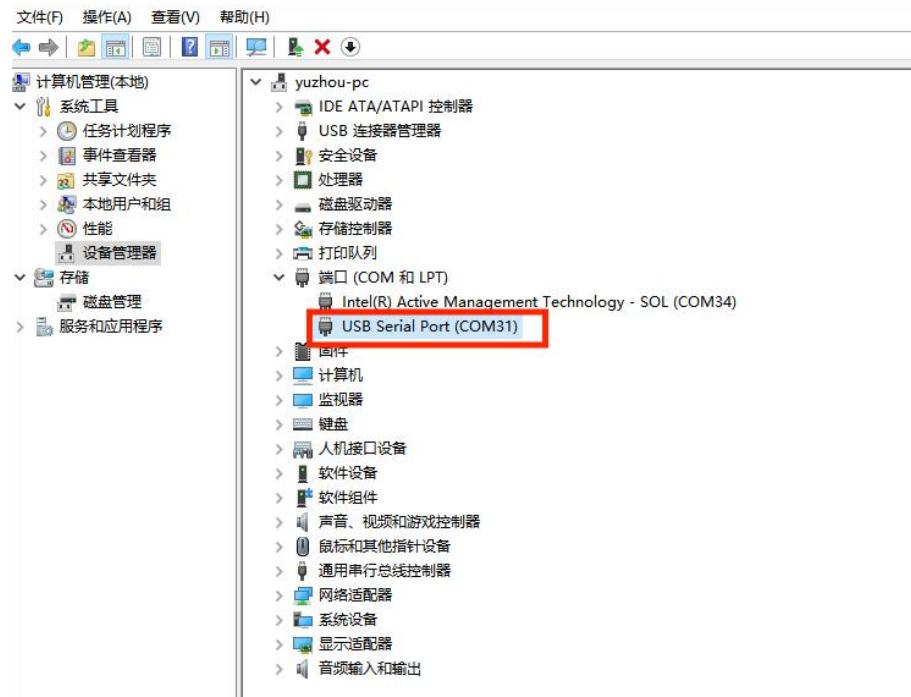
## 4.Debug the tracker AN95

### 4.1 Install the USB divers of the UART Port

Connect the USB cable with PC, then install COM port driver or wait drivers update on windows 10 / windows 11 when Serial Port USB connected, make sure the Serial Port list in the Device Manager.

If the Windows OS will not update, try to install manually the drivers with

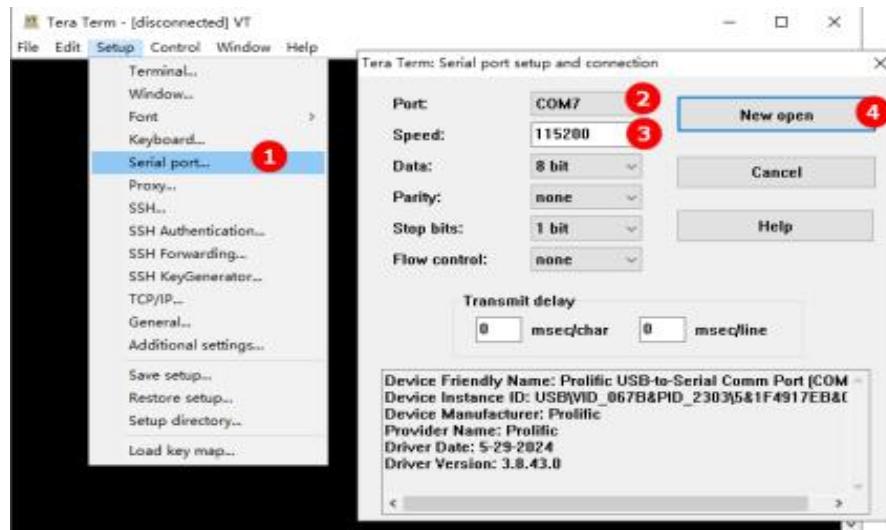
[PL2303\\_Prolific\\_DriverInstall](#)



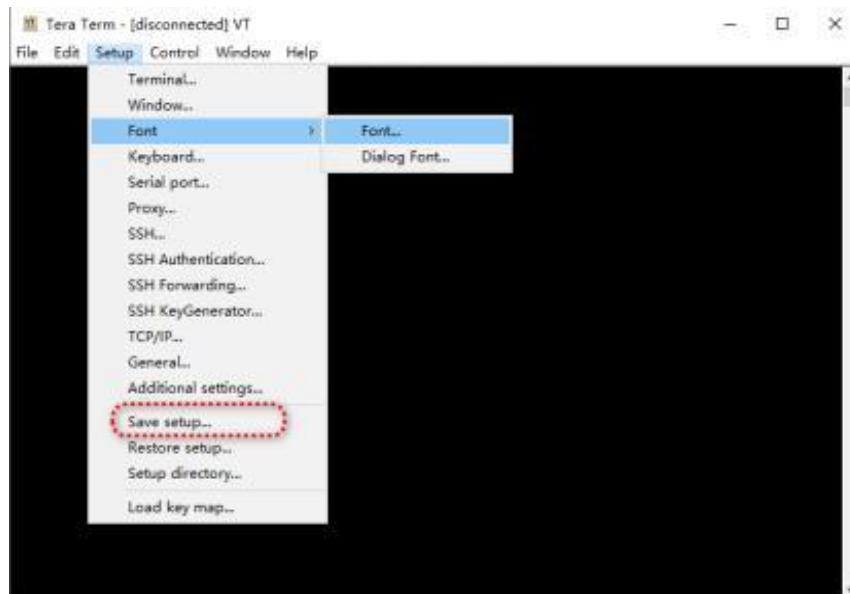
### 4.2 To use the Tera Term to debug

Most serial tool can debug; it's supposed to use the serial tool like Tera Term.

- Select the **Setup** table, and click the **Serial port**.
- Select the **Port**, which should be same as the port name in device manager.
- Select the **Speed** as 115200 (the speed is the baud rate, of most products are 115200).
- Click the **New Open**.



e. To use Tera Term easily every time, it's proposal to save the setup and override the default config file, and select the font from the font settings as you like.



f. Key some AT commands in the terminal window, these commands will get response from the device, when it prints OK as the result that means the issue commands pass through UART port and save into device.

### Note

Here some basic function checking command, please refer to the AT commands file if any more or commands' details.

- AT+XINNET, to check network status.
- AT+XINVER, to check the versions.
- AT+XINPWR, to check the external power and battery info.
- AT+XINGPS, to check the GPS location info

# Regulatory Conformance

## FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### FCC RF Radiation Exposure Statement Caution:

To maintain compliance with the FCC's RF exposure guidelines, place the product at least 20cm from nearby persons.

## ISED

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Radiation Exposure Statement: The product complies with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Déclaration d'exposition aux radiations: Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.